

WEST

L12: Entry 11 of 40

File: DWPI

Sep 17, 2002

DERWENT-ACC-NO: 2000-366951

DERWENT-WEEK: 200276

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TITLE: Battery housing consists of cold rolled sheet having an interior electroplated coating with incorporated carbon particles to provide low long term and initial battery internal resistance

INVENTOR: BORISCH, A; FERENCZY, N ; KOSSLERS, H ; MONSCHEUER, B ; OLBERDING, W ; SCHENCK, A ; SCHMIDT, F ; SCHENCK, ; SCHENCK, S

PATENT-ASSIGNEE:

| ASSIGNEE | CODE |
|---------------------------|-------|
| HILLE & MUELLER GMBH | HILLN |
| HILLE & MUELLER GMBH & CO | HILLN |

PRIORITY-DATA: 1998DE-1052202 (November 12, 1998)**PATENT-FAMILY:**

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|-----------------|--------------------|----------|-------|------------|
| JP 2002530810 W | September 17, 2002 | | 018 | H01M002/02 |
| DE 19852202 A1 | May 25, 2000 | | 004 | H01M002/02 |
| WO 200030188 A1 | May 25, 2000 | G | 000 | H01M002/02 |
| AU 9964748 A | June 5, 2000 | | 000 | H01M002/02 |
| BR 9915258 A | August 7, 2001 | | 000 | H01M002/02 |
| EP 1142041 A1 | October 10, 2001 | G | 000 | H01M002/02 |
| DE 19852202 C2 | January 24, 2002 | | 000 | H01M002/02 |
| KR 2001089448 A | October 6, 2001 | | 000 | H01M002/02 |
| CN 1326593 A | December 12, 2001 | | 000 | H01M002/02 |
| DE 29924150 U1 | March 7, 2002 | | 000 | H01M002/02 |
| AU 751287 B | August 8, 2002 | | 000 | H01M002/02 |

DESIGNATED-STATES: AU BR CA CN IL IN JP KR MX PL RU SG US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE**APPLICATION-DATA:**

PRIORITY DOC.
BAD DATE

| PUB-NO | APPL-DATE | APPL-NO | descriptor |
|----------------|-------------------|----------------|-----------------|
| JP2002530810W | October 20, 1999 | 1999WO-EP07961 | |
| JP2002530810W | October 20, 1999 | 2000JP-0583097 | |
| JP2002530810W | | WO 200030188 | Based on |
| DE 19852202A1 | November 12, 1998 | 1998DE-1052202 | |
| WO 200030188A1 | October 20, 1999 | 1999WO-EP07961 | |
| AU 9964748A | October 20, 1999 | 1999AU-0064748 | |
| AU 9964748A | | WO 200030188 | Based on |
| BR 9915258A | October 20, 1999 | 1999BR-0015258 | |
| BR 9915258A | October 20, 1999 | 1999WO-EP07961 | |
| BR 9915258A | | WO 200030188 | Based on |
| EP 1142041A1 | October 20, 1999 | 1999EP-0952618 | |
| EP 1142041A1 | October 20, 1999 | 1999WO-EP07961 | |
| EP 1142041A1 | | WO 200030188 | Based on |
| DE 19852202C2 | November 12, 1998 | 1998DE-1052202 | |
| KR2001089448A | May 12, 2001 | 2001KR-0706017 | |
| CN 1326593A | October 20, 1999 | 1999CN-0813219 | |
| DE 29924150U1 | October 20, 1999 | 1999DE-2024150 | |
| DE 29924150U1 | October 20, 1999 | 1999EP-0952618 | Application no. |
| AU 751287B | October 20, 1999 | 1999AU-0064748 | |
| AU 751287B | | AU 9964748 | Previous Publ. |
| AU 751287B | | WO 200030188 | Based on |

INT-CL (IPC): C25 D 3/12; C25 D 3/56; C25 D 5/00; C25 D 5/10; C25 D 5/26; C25 D 5/50; C25 D 7/00; C25 D 7/04; C25 D 15/02; H01 M 2/02

ABSTRACTED-PUB-NO: DE 19852202A

BASIC-ABSTRACT:

NOVELTY - The battery housing consists of cold rolled sheet having an interior electroplated coating with incorporated carbon, graphite or carbon black particles.

DETAILED DESCRIPTION - A battery housing consists of shaped cold rolled sheet with an interior electroplated coating of Ni, Co, Fe, Sn or their alloys incorporating carbon, graphite or carbon black particles.

An INDEPENDENT CLAIM is also included for production of strip for the above battery housing.

USE - As a battery housing.

ADVANTAGE - A battery, provided with the above housing, exhibits a lower increase in internal resistance on long term storage and a lower initial internal resistance compared with conventional batteries.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: BATTERY HOUSING CONSIST COLD ROLL SHEET INTERIOR ELECTROPLATING COATING INCORPORATE CARBON PARTICLE LOW LONG TERM INITIAL BATTERY INTERNAL RESISTANCE

DERWENT-CLASS: L03 M11 X16

CPI-CODES: L03-E01D; M11-A; M11-B;

EPI-CODES: X16-F01;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2000-110959

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L1: Entry 1 of 5

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Feb 3, 2000

DERWENT-ACC-NO: 2000-195106

DERWENT-WEEK: 200221

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TITLE: Surface-treated steel sheet for battery case has a graphite-dispersed nickel-plated layer or a graphite-dispersed nickel-alloy-plated layer

INVENTOR: OHMURA, H; TOMOMORI, T ; YAMANE, K

PATENT-ASSIGNEE:

| | |
|-------------------|------|
| ASSIGNEE | CODE |
| TOYO KOHAN CO LTD | TOJO |

PRIORITY-DATA: 1998JP-0223747 (July 24, 1998)

PATENT-FAMILY:

| PUB-NO | PUB-DATE | LANGUAGE | PAGES | MAIN-IPC |
|-----------------|--------------------|----------|-------|------------|
| WO 200005437 A1 | February 3, 2000 | J | 027 | C25D015/02 |
| TW 445663 A | July 11, 2001 | | 000 | H01M002/26 |
| AU 9947984 A | February 14, 2000 | | 000 | C25D015/02 |
| EP 1103638 A1 | May 30, 2001 | E | 000 | C25D015/02 |
| JP 2000561381 X | September 25, 2001 | | 000 | C25D015/02 |
| CN 1311829 A | September 5, 2001 | | 000 | C25D015/02 |
| KR 2001086350 A | September 10, 2001 | | 000 | H01M002/02 |

DESIGNATED-STATES: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

APPLICATION-DATA:

| PUB-NO | APPL-DATE | APPL-NO | DESCRIPTOR |
|----------------|------------------|----------------|------------|
| WO 200005437A1 | July 22, 1999 | 1999WO-JP03907 | |
| TW 445663A | July 13, 1999 | 1999TW-0111845 | |
| AU 9947984A | July 22, 1999 | 1999AU-0047984 | |
| AU 9947984A | | WO 200005437 | Based on |
| EP 1103638A1 | July 22, 1999 | 1999EP-0931468 | |
| EP 1103638A1 | July 22, 1999 | 1999WO-JP03907 | |
| EP 1103638A1 | | WO 200005437 | Based on |
| JP2000561381X | July 22, 1999 | 1999WO-JP03907 | |
| JP2000561381X | July 22, 1999 | 2000JP-0561381 | |
| JP2000561381X | | WO 200005437 | Based on |
| CN 1311829A | July 22, 1999 | 1999CN-0809111 | |
| KR2001086350A | January 18, 2001 | 2001KR-0700795 | |

INT-CL (IPC): C25 D 15/02; H01 M 2/02; H01 M 2/22; H01 M 2/26

ABSTRACTED-PUB-NO: WO 200005437A

BASIC-ABSTRACT:

NOVELTY - The surface-treated steel sheet is formed on at least the surface serving as an inner side of a battery case with a graphite-dispersed nickel-plated layer or a graphite-dispersed nickel-alloy-plated layer. The battery case is formed by drawing, DI working and DTR working the above surface-treated steel sheet.

DETAILED DESCRIPTION - The alloy plated layer is preferably formed by a nickel-cobalt alloy, nickel-cobalt-iron alloy, nickel-manganese alloy, nickel-phosphorus alloy or nickel-bismuth alloy.

USE - Surface-treated steel sheet for a battery case for a battery improved in its electrical contact with a battery positive electrode active substance.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: SURFACE TREAT STEEL SHEET BATTERY CASE GRAPHITE DISPERSE NICKEL PLATE LAYER GRAPHITE DISPERSE NICKEL ALLOY PLATE LAYER

DERWENT-CLASS: L03 X16

CPI-CODES: L03-E01D;

EPI-CODES: X16-F01;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 1778U

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2000-060436

Non-CPI Secondary Accession Numbers: N2000-144382